



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/583,982

04/23/2007

Mogens Mathiesen

43315-232647

8441

26694

7590

11/19/2009

VENABLE LLP

P.O. BOX 34385

WASHINGTON, DC 20043-9998

EXAMINER

TRUONG, DENNIS

ART UNIT

PAPER NUMBER

2169

MAIL DATE

DELIVERY MODE

11/19/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/583,982	Applicant(s) MATHIESEN ET AL.	
	Examiner DENNIS TRUONG	Art Unit 2169	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-13 and 15-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-13 and 15-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 June 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to Applicant's Amendments filed 9/14/2009.

Response to Amendment

2. It is acknowledged that claims 1, 3-6, 8-13, 15 and 16 have been amended, and 2, 23 have been canceled.

3. Claims 1, 3-13, 15-22 are pending.

4. In view of Applicant's amendments to claim 13 to remove "which when run" the rejection to claim 13 under both 35 USC 112 2nd paragraph and 35 USC 101 has been withdrawn.

Response to Arguments

5. Applicant's arguments with respect to amended claims have been considered but are moot in view of the new ground(s) of rejection.

35 USC 101

6. As per Claims 15-18 the claims recite "computer readable medium" and in view of the specification, page 16 lines 5-7 further defining the medium as "magnetic disk, CD-ROM, or DVD, Hard disk..." This indicates that the medium is drawn to storage medium and not to any form of energy, waves, or any form of propagation or the like, therefore complies with 35 USC 101.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2169

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 3, 8, 13,15-17, 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Vines et al. (US 6006171)** as in view of **Oberg (US 20060205389 A1)**.

As per Claim 1, Vines discloses:

- **A method to carry out at least one of retrieving or accessing information about an equipment, plant or process in a facility comprising a plurality of devices and one or more control systems for process monitoring and control, wherein energy-related information and other data for each said device is stored in a one of said control system systems, at least by (Abstract) where it is known in the art that parameters for monitoring equipment incorporates “energy-related information”.**
- **selecting by a maintenance user using a hand-held or wearable portable computing device one of said equipment, plant or process, at least by (col. 4 lines 9-11) “selection of process control monitoring station, association of equipment tag names in the maintenance database with process control variables” where the selection of the monitoring station is in association with the selection of which equipment will be monitored.**
- **configuring a software entity recorded on a computer readable medium with an identity of the selected said equipment, plant or process, the software entity comprising links to information regarding all equipment, plant, process monitored and controlled by the control systems, at least by (col. 4 lines 21-32) where DMM is the software claimed, Ref. 450b is the identity of the**

Art Unit: 2169

- equipment, Ref. 450a is the information pertaining to the equipment that can be monitored.
- **retrieving information associated with said selected equipment, plant or process with the configured software entity, the information comprising maintenance information, technical information, and contact information for internal users having technical knowledge about the selected equipment, plant or process**, at least by (col. 5 lines 51-60) where the work order is the maintenance information, and (col. 6 lines 1-6) crew assigned to do the work is the people knowledgeable about selected equipment otherwise they would not be assigned.
 - But Vines fails to specifically disclose: **(a) a maintenance user using a hand-held or wearable portable computing device and (b) presenting or displaying on said portable computing device at least information about a new event or an alarm for said selected device and a the location of said equipment, plant or process to a maintenance user and utilizing by the maintenance user the information to address the new event or alarm,**

However, **O**Berg teaches the above limitation **(a)** at least by (Fig. 1 ref 14, paragraph [0031]) “FIG. 2 shows a PDA to be used as the mobile unit 14. The **mobile unit 14** comprises an output means for outputting information obtained from the central control system”, and **O**berg teaches limitation **(b)** at least by (paragraph [0009] “[0009] This object is achieved by a method comprising **receiving information about the identity of the selected object**, recording a voice message, storing the message associated with a software object representing the selected real world object and storing the message so

Art Unit: 2169

that the message is accessible from the control system, indicating the presence of a message associated with the object, and upon request presenting the content of the message. Thus, if the **operator wishes to make a note about an object when he is inspecting the plant, he simply records his message and the message is stored associated with a software object representing the selected real world object.** The message is stored such that it is easily accessible from any user interface connected to the control system. The **stored messages may serve as an input for maintenance actions required or instructions to other persons operating the process.** A mobile user is a person walking around in the plant visiting machines and equipment. The **mobile user is, for example, an operator of the control system, a technician, or an engineer working in the plant”.**

Therefore would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **OBerg** into the teaching of **Vines** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of monitoring and performing at least all of the test, diagnostic, and maintenance operations without being restricted to one location increasing mobility.

As per claim 2, canceled.

As per claim 3, claim 1 is incorporated and Vines further discloses:

- **assigning the new event or alarm for said equipment, plant or process to a maintenance user, at least by (col. 6 lines 4-6) “crew assigned to do the work”.**

As per claim 8, claim 1 is incorporated and Vines further discloses:

Art Unit: 2169

- **configuring a technical information link of component of a said equipment, plant or process with an identity of an internal user with access to relevant technical information**, at least by (col. 6 lines 1-6).

Claim 13 refers to a computer program product for retrieving and/or accessing information about an equipment, part or process comprising a computer readable medium and computer code means corresponding to method claim 1, and is rejected under the same reason set forth in connection to rejections of claim 1. Where **Vines** further discloses a computer program product on computer readable medium at least by (claim 10).

Claims 15, 16, 17 refers to a software architecture recorded on a computer readable medium for retrieving and accessing information about an equipment, part or process comprising a plurality of devices and one or more control system for process monitoring and control corresponding to the method claims 1, 2, 2 respectively, and are rejected under the same reason set forth in connection to rejections of claims 1, 2, 2 respectively above. Where **Vines** further discloses a computer program product on computer readable medium at least by (claim 10).

Claims 19, 20 are control system claims corresponding to the method claims 1, 2, respectively, and are rejected under the same reason set forth in connection to rejections of claims 1, 2 respectively above. Where **Vines** discloses a system at least by Fig. 1.

As per claim 21, claim 1 is incorporated and Vines further discloses:

- **wherein the maintenance information comprises at least one of service history or service documentation**, at least by (col. 5 lines 51-54) " track the

Art Unit: 2169

history of work that has been performed on a specific piece of equipment by viewing the equipment history screen shown in FIG. 8”

As per claim 22, claim 1 is incorporated and Vines further discloses:

- **wherein the information further comprises system data, user data, object data, technical information, specification, supplier information; a user knowledgeable about the selected equipment, plant, or process; a user responsible the selected equipment, plant, or process; users trained about the selected equipment, plant, or process; technical drawings of the selected equipment, plant, or process; contact information regarding users of the selected equipment, plant, or process; or safety information regarding the selected equipment, plant, or process, at least by (col. 5 lines 49-60), (col. 6 lines 7-15), (col. 5 lines 16-29).**

As per claim 23, canceled.

9. **Claims 4-7, 9-12, 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Vines and Oberg** further in view of **Tonack (US 7120830 B2)**

As per Claim 4, Claim 1 is incorporated and further neither Vines nor Oberg discloses:

- **retrieving an address for an external user or expert and presenting the address to the maintenance user.**

However, **Tonack** teaches the above limitations at least by (col. 7 lines 4-26) teaching a maintenance coordination software, where maintenance calls are placed and maintenance technicians are made aware of the maintenance calls in a number of ways; through a terminal listing, email or pager calls, and possible email server can send out

Art Unit: 2169

notifications to particular locations so that specific technicians related to the locations are notified. Also (col. 10 lines 43-44) “wherein the remote computer is further configured to relay the content of the alert to a maintenance technician”

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tonack** into the teaching of **Vines and Oberg** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of providing a maintenance coordinator in a system that automatically detects faults in a system so together provides an efficient way to coordinate service request with corresponding technician.

As per Claim 5, Claim 4 is incorporated and further neither Vines nor Oberg discloses:

- **establishing contact between the external user or expert and the maintenance user.**

However, **Tonack** teaches the above limitations at least by (col. 7 lines 4-26) teaching a maintenance coordination software, where maintenance calls are placed and maintenance technicians are made aware of the maintenance calls in a number of ways; through a terminal listing, email or pager calls, and possible email server can send out notifications to particular locations so that specific technicians related to the locations are notified. Also (col. 10 lines 43-44) “wherein the remote computer is further configured to relay the content of the alert to a maintenance technician”

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tonack** into the teaching of **Vines and Oberg** because one of the ordinary skill in the art would have been motivated to use

Art Unit: 2169

such a modification for the purpose of providing a maintenance coordinator in a system that automatically detects faults in a system so together provides an efficient way to coordinate service request with corresponding technician.

As per Claim 6, Claim 4 is incorporated and further neither Vines nor Oberg discloses:

- **establishing a shared display or shared computer application contact between the external user or expert and the maintenance user**

However, **Tonack** teaches the above limitations at least by (col. 9 lines 21 – 35) “maintenance coordination system” where the system is used by operators, technicians and other users for making repair calls, check equipment history process, enter production equipment status, trend analysis process, etc.

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tonack** into the teaching of **Vines and Oberg** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of providing a maintenance coordinator in a system that automatically detects faults in a system so together provides an efficient way to coordinate service request with corresponding technician.

As per Claim 7, Claim 1 is incorporated and further neither Vines nor Oberg discloses:

- **configuring a selected technical characteristic of the selected said equipment, plant or process with an indicator of a high, medium or low priority for returning the selected said equipment, plant or process to a normal state.**

Art Unit: 2169

However, **Tonack** teaches the above limitations at least by (col. 6 lines 1-18) “indicate the operable condition of the machine....Select Problem Code....Operator Notes” where each of these data fields provides the condition of the device providing information which can be used to prioritize the importance of the repair to the failed device. Furthermore (col. 6 lines 49-53) “maintenance and repair technicians can better prioritize their response to service calls if they are experiencing multiple simultaneous failures.”

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tonack** into the teaching of **Vines and Oberg** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of providing a maintenance coordinator in a system that automatically detects faults in a system so together provides an efficient way to coordinate service request with corresponding technician.

As per Claim 9, Claim 8 is incorporated and further neither Vines nor Oberg discloses:

- **configuring said equipment, plant or process with an identity of the internal user with dependent on information recorded in the internal user profile.**

However, **Tonack** teaches the above limitations at least by (col. 7 lines 10 – 14) “request may include an instruction to list only maintenance calls in a particular location or relation to a particular type of production equipment. Thus, maintenance technicians may focus their attention on production equipment only within their area of responsibility.”

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tonack** into the teaching of **Vines**

Art Unit: 2169

and Oberg because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of providing a maintenance coordinator in a system that automatically detects faults in a system so together provides an efficient way to coordinate service request with corresponding technician.

As per Claim 10, Claim 8 is incorporated and further neither Vines nor Oberg discloses:

- **configuring said equipment, plant or process with an identity of a user with dependent on information recorded in the internal profile classified by any from the list of: responsibility, training, certified qualification, work experience.**

However, **Tonack** teaches the above limitations at least by (col. 7 lines 10 – 14) “request may include an instruction to list only maintenance calls in a particular location or relation to a particular type of production equipment. Thus, maintenance technicians may focus their attention on production equipment only within their area of responsibility.”

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tonack** into the teaching of **Vines and Oberg** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of providing a maintenance coordinator in a system that automatically detects faults in a system so together provides an efficient way to coordinate service request with corresponding technician.

As per Claim 11, Claim 1 is incorporated and further neither Vines nor Oberg discloses:

Art Unit: 2169

- **attaching a user observation to the retrieved information associated with said equipment, plant or process as any from the list of: a text message, a video clip, a photograph, sketch, sound recording.**

However, **Tonack** teaches the above limitations at least by (col. 8 lines 29 - 51) disclosing information entered by the technician such as information related to the repair efforts.

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tonack** into the teaching of **Vines and Oberg** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of providing a maintenance coordinator in a system that automatically detects faults in a system so together provides an efficient way to coordinate service request with corresponding technician.

As per Claim 12, Claim 1 is incorporated and further neither Vines nor Oberg discloses:

- **carrOberg out a repair, re-configure, re-programming or replacement of a faulty part of said equipment, plant or process based at least in part on technical information associated with said equipment, plant or process retrieved and/or presented utilizing the software entity.**

However, **Tonack** teaches the above limitations at least by (col. 8 lines 29 - 51) “During the repair effort or upon its completion...” the technician has the ability to enter information related to the repair efforts.

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tonack** into the teaching of **Vines**

Art Unit: 2169

and Oberg because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of providing a maintenance coordinator in a system that automatically detects faults in a system so together provides an efficient way to coordinate service request with corresponding technician.

Claim 18 refer to a software architecture recorded on a computer readable medium for retrieving and accessing information about an equipment, part or process comprising a plurality of devices and one or more control system for process monitoring and control corresponding to the method claim 4 and is rejected under the same reason set forth in connection to rejections of claim 4 above. Where **Vines** further discloses a computer program product on computer readable medium at least by (claim 10).

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2169

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DENNIS TRUONG whose telephone number is (571)270-3157. The examiner can normally be reached on MON - FRI: 7:30 - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mahmoudi Tony can be reached on (571) 272-4078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tony Mahmoudi/
Supervisory Patent Examiner, Art Unit
2169

/Dennis Truong/
Examiner, Art Unit 2169